

remaining Section 112, second paragraph rejections is respectfully requested because all the language used has support in the original specification and claims, and imparts the inventive meaning to one skilled in the art. Claim 36 has been amended to read as an independent claim. Claims 39, 45 and 50 have been amended to depend from amended claim 35. Claim 40 has been amended to depend from amended claim 39. Claim 41 has been amended to depend from amended claim 40.

A Terminal Disclaimer and requisite fee are filed herewith to obviate any double-patenting rejection.

With respect to the substantive rejections of the claims asserted over the prior art of record, Applicant submits that the prior art references do not singly or in the aggregate disclose or teach the claimed limitations. The Masuda et al. patent (U.S. Patent No. 4,076,663) teaches drying a polymeric material for at least three hours, not the 1-3 minute drying time of amended claim 35; also, the advantage of the particular size of the islets is neither discussed nor suggested. The Burkholder, Jr. patent (U.S. Patent No. 4,154,898) similarly teaches a drying time of several minutes, and the drying time of the Gross patent (U.S. Patent No. 4,017,653) teaches a minimum drying time of at least an hour. No other prior art of which Applicant is aware, including but not limited to Nishino et al. (U.S. Patent No. 5,275,884); Bottiglione et al. (U.S. Patent No. 5,246,770); and Miller (U.S. Patent No. 4,321,997), discusses short drying times such as are set forth in claim 35. Regarding new and unexpected results attributable to the islet size set forth in claim 36, a Declaration is in preparation to establish the surprisingly higher absorbent capacity of such small diameters in contrast with super-absorbent material in non-islet form or in dots of a larger diameter. The Declaration will be submitted in due course.

For reasons including the above, the asserted indefiniteness, anticipation and obviousness rejections may be seen as in condition for withdrawal.

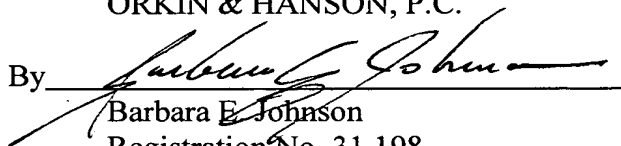
CONCLUSION

Based on the foregoing amendments and remarks, reconsideration of the objection and the rejections, and allowance of pending claims 35, 36, 38-50, and 61-64 are respectfully requested.

Respectfully submitted,

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PATENT APPLICATION

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The marked-up versions of amended claims 35, 36, 39, 40, 41, 45, 50 and 62 are as follows:

35. (Once Amended) A substrate comprising a super-absorbent material applied to the substrate, wherein the super-absorbent material is obtained by allowing suitable monomers to polymerize in the presence of a catalyst in order to obtain a pre-cross-linked polymer solution, adding a cross-linking agent containing two functional groups which are capable after thermal excitation of reacting within at least ten minutes with carboxylate or carbonic acid functional groups to the polymer solution to obtain a pasty composition, subsequently applying the composition on or in the substrate and allowing the applied composition to dry for one to three minutes at between 150°C and 200°C to form a swellable paste.

36. (Once Amended) [The] A substrate [as claimed in claim 35] comprising a super-absorbent material applied to the substrate, wherein the material has a significantly enlarged surface area achieved by having the super-absorbent material in the form of a plurality of discrete, substantially semi-spherical islets with a diameter between 10 and 1000 μ .

39. (Once Amended) The substrate as claimed in claim [37] 35, wherein the pasty composition is applied to the substrate in the form of discrete, substantially semi-spherical islets having a diameter of 10 to 1000 μ and is allowed to dry and cross-link.

40. (Once Amended) The substrate as claimed in claim [37] 39, further comprising adding a foaming agent to the pasty composition prior to applying the composition to the substrate, wherein the composition is caused to foam at any time after addition of the foaming agent.

41. (Once Amended) The substrate as claimed in claim [37] 40, wherein the pasty composition further comprises at least one other additive chosen from agents for changing the viscosity of the composition, agents for improving the adhesion of the super-absorbent material to the substrate, agents for softening the super-absorbent material, and agents for making the composition conductive.

45. (Once Amended) The substrate as claimed in claim [37] 35, wherein the cross-linking agent contains two functional groups which are capable after thermal excitation of reacting in a short time with carboxylate or carbonic acid functional groups.

50. (Once Amended) The substrate as claimed in claim [37] 35, wherein the pasty composition consists of 95-99.9% by weight of an aqueous solution of pre-cross-linked poly(meth)acrylic acid and 0.1-5% by weight of a cross-linking agent.

62. (Once Amended) [An] A hygiene product[, such as] selected from the group consisting of a baby napkin, a sanitary towel, and an incontinence product, comprising the substrate as claimed in claim 35.